UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

MAR - 3 2000

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS

Pursuant to the National Environmental Policy Act, an environmental review has been performed on the following action.

TITLE: Middle Waterway Shore Restoration Project--
Supplemental Environmental Assessment and
Finding of No Significant Impact (FONSI)

LOCATION: Middle Waterway Tacoma, Washington

SUMMARY: The National Oceanic and Atmospheric Administration (NOAA) is the lead federal agency for National Environmental Policy Act (NEPA) compliance for the proposed Middle Waterway Shore Restoration Project, Tacoma, Washington. The cooperating agencies and tribes include the other Commencement Bay Natural Resource Trustees -- the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the Washington Department of Ecology (as lead state Trustee), the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, and the U.S. Department of the Interior (U.S. Fish and Wildlife Service and the Bureau of Indian Affairs). These parties are participating in damage assessment and restoration planning activities in the Commencement Bay environment.

NOAA prepared an supplement Environmental Assessment (EA) for this project to evaluate alternatives to correct deficiencies noted during monitoring of the original pilot project. The public and other interested parties have participated in the review of the monitoring reports and the evaluation of alternatives and concluded that the preferred alternatives should be those referenced in the Adaptive Management Activities Plan. Those alternatives are based upon the best available technologies and best meet the goals and objectives of the natural resource trustees by maximizing ecological benefits and minimizing potential adverse environmental impacts to the environment.

The environmental review process has led NOAA to conclude that this restoration action will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

RESPONSIBLE OFFICIAL: Penelope D. Dalton
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway, 14th Floor
Silver Spring, Maryland 20910-3226
Phone: 301/713-2239

The environmental review process led us to conclude that these restoration actions will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the FONSI, including the EA is available from the Responsible Official.

Sincerely,

Susan Fruchter

Susan B. Fruchter
NEPA Coordinator
Office of Policy
and Strategic Planning

Enclosure

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT (SUPPLEMENTAL)
FOR THE
MIDDLE WATERWAY SHORE RESTORATION PROJECT
TACOMA, WASHINGTON

The National Oceanic and Atmospheric Administration (NOAA) is the lead federal agency for National Environmental Policy Act (NEPA) compliance for the proposed Middle Waterway Shore Restoration Project, Tacoma, Washington. The cooperating agencies and tribes include the other Commencement Bay Natural Resource Trustees -- the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the Washington Department of Ecology (as lead state Trustee), the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, and the U.S. Department of the Interior (U.S. Fish and Wildlife Service and the Bureau of Indian Affairs). These parties are participating in damage assessment and restoration planning activities in the Commencement Bay environment.

NOAA prepared a supplemental Environmental Assessment (EA) for this project to evaluate alternatives to correct deficiencies noted during monitoring of the original pilot project. The public and other interested parties have participated in the review of the monitoring reports and the evaluation of alternatives and concluded that the preferred alternatives should be those referenced in the Adaptive Management Activities Plan. Those alternatives are based upon the best available technologies and best meet the goals and objectives of the natural resource trustees by maximizing ecological benefits and minimizing potential adverse environmental impacts to the environment.

DETERMINATION:

Based upon an environmental review and evaluation of the supplemental Environmental Assessment for the Middle Waterway Shore Restoration Project, I have determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human

environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, an environmental impact statement is not required for this project.

Penelope D. Dalton 2/21/00

Penelope D. Dalton
Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

Date

ENVIRONMENTAL ASSESSMENT (SUPPLEMENTAL)
FOR THE
MIDDLE WATERWAY SHORE RESTORATION PROJECT
TACOMA, WASHINGTON

LEAD FEDERAL AGENCIES FOR EA:	U.S. Fish and Wildlife Service (U.S. Dept. Interior) National Oceanic and Atmospheric Administration
PARTICIPATING AGENCIES/TRIBES:	Commencement Bay Natural Resource Trustees (U.S. Department of the Interior, State of Washington, Muckleshoot Indian Tribe, Puyallup Tribe of Indians)
ABSTRACT:	This supplemental Environmental Assessment (EA) has been prepared for the Middle Waterway Shore Restoration Project. The original pilot project was designed to evaluate the design and construction of the mudflat and estuarine habitat and to evaluate the viability of siting habitat restoration projects in close proximity to industrial activities on the Tacoma tideflats. Monitoring of the pilot project has led the Trustees to conclude that adaptive management activities would be needed in order to meet the original project goals. This supplemental EA focuses on those proposed activities.
ADMINISTRATIVE RECORD:	Copies of the final supplemental EA are available at the address listed below or available for download at www.darcnw.noaa.gov/cb-rest.htm.
CONTACT PERSON:	Jennifer Steger National Oceanic and Atmospheric Administration Damage Assessment and Restoration Center NW 7600 Sand Point Way NE Seattle, WA 98115-0070 Phone: 206-526-4363 Fax: 206-526-6665 EMAIL: Jennifer.Steger@noaa.gov

September 9, 1999

ENVIRONMENTAL ASSESSMENT (SUPPLEMENTAL)
FOR THE
MIDDLE WATERWAY SHORE RESTORATION PROJECT
TACOMA, WASHINGTON

The Commencement Bay Natural Resource Trustees -- the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the Washington Department of Ecology (as lead state Trustee), the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, the U.S. Department of the Interior (including the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs), and the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce -- are currently conducting a natural resource damage assessment and restoration planning for Commencement Bay.

In December 1991, Simpson Tacoma Kraft Co. (Simpson), Champion International Corporation (Champion) and the Washington Department of Natural Resources entered into a natural resources damages settlement with the Trustees regarding the St. Paul Waterway Problem Area. Under the agreement, Simpson and Champion (the Companies) paid $500,000 in damages and agreed to work with the Trustees in constructing a restoration project.. After a site evaluation process, the Trustees and the Companies selected a parcel on the Middle Waterway, owned by Simpson. Simpson agreed that the property would be permanently committed to use for habitat restoration.

The Middle Waterway Shore Restoration Project was designed to serve as a pilot project to develop information needed to implement further restoration projects in the Commencement Bay environment, including time and procedures to plan, design and construct restoration projects and to evaluate the viability of siting habitat restoration projects in close proximity to industrial activities on the Tacoma tideflats.

The Middle Waterway Shore Restoration consists of an approximately 3.3-acre nearshore site in Commencement Bay that was designed to be restored to functional estuarine habitat. In early 1995, approximately 1.5 acres of industrial fill was converted into estuarine wetland, and the adjacent lower intertidal area was regraded into a more structurally diverse intertidal area. The site presently comprises a low-elevation mudflat, low salt marsh, high salt marsh and upland riparian buffer. In mid-1995 the riparian buffer was planted with upland vegetation and a smalll area of low salt marsh was planted with sods of salt grass. The salt marsh vegetation planting was unsuccessful.

Monitoring for the Middle Waterway restoration project is intended to provide information necessary for maintaining the newly established estuarine habitat over time and valuable for planning future restoration projects in Commencement Bay. Monitoring includes descriptive studies documenting general development, use and trends associated with the new estuarine, intertidal and saltmarsh habitat. As a consequence of monitoring of this project, and the failure of the vegetative plantings and recolonization on the mudflat, on May 22, 1996, additional areas were planted with a variety of low salt marsh vegetation. Post-construction site monitoring began in April 1996.

Continual monitoring of the site has demonstrated that there are several areas needing attention. Consultation among the National Resource Trustee technical staff, technical staff with the relevant regulatory agencies, interested members of the public, and with contractors preparing a bay-wide monitoring plan and a vegetation survey for the Commencement Bay tideflats has led the Trustees to conclude that the preferred alternative for this project is to conduct those activities referenced in the Adaptive Management Activities Plan. These include removing the top two feet of sand from portions of the site and replacing it with amended soil, planting native vegetation, and anchoring logs at pre-determined locations to prevent erosion and to create a bench environment.

All permits required by the State and Federal regulatory agencies have been reviewed and approved as has the State's Environmental Policy Act Checklist. A Biological Evaluation and informal consultation addressing Endangered Species Act issues has been completed. The proposed activities were additionally evaluated under the goals and objectives and other evaluation criteria specified by the Commencement Bay Natural Resource Trustees' Programmatic Environmental Impact Statement and Restoration Plan and with the evaluation factors under the National Environmental Policy Act (40 CFR 1508.27). Based on a review of all of these factors and the referenced documents, the Trustees have concluded that the proposed adaptive management activities will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the Finding of No Significant Impact is attached for the Agency's review and approval.

DOCUMENTS INCORPORATED BY REFERENCE:

1995.	Commencement Bay Natural Resource Trustees. Programmatic Environmental Impact Statement and Restoration Plan.
03/21/95	Middle Waterway Shore Restoration Project Environmental Assessment and Finding of No Significant Impact
06/16/99	Adaptive Management Activities Plan
06/16/99	Biological Evaluation under Endangered Species Act
06/21/99	Joint Aquatic Resources Permit Application Form (JARPA)
06/21/99	State Environmental Policy Act Checklist

TITLE: Adaptive Management Activities, The Middle Waterway Restoration Project Site

LOCATION: Middle Waterway, Commencement Bay, Tacoma, Washington

BACKGROUND: The Commencement Bay Natural Resource Trustees [Puyallup Tribe of Indians; Muckleshoot Indian Tribe; Washington Department of Ecology (as lead state Trustee); Washington Department of Fish and Wildlife; Washington Department of Natural Resources; Department of the Interior, including Fish and Wildlife Service and Bureau of Indian Affairs; and National Oceanic and Atmospheric Administration (NOAA) of Department of Commerce] are currently conducting a natural resource damage assessment and restoration planning for Commencement Bay.

In December 1991, Simpson Tacoma Kraft Co. (Simpson), Champion International Corporation (Champion) and the Washington Department of Natural Resources entered a natural resource damage settlement with the Trustees regarding the St. Paul Waterway Problem Area. Under the agreement, Simpson and Champion (the companies) paid $500,000 in damages and agreed to work with the Trustees in planning a restoration project to be constructed using damages. After a site evaluation process, the Trustees and the companies selected a parcel on the Middle Waterway owned by Simpson as the restoration project site (the Middle Waterway Habitat Restoration Project). Simpson has agreed that the property will be permanently committed to use for habitat restoration.

Middle Waterway Pilot Restoration Project: The Pilot Restoration Project is to aid in the development of the information needed to plan and implement further restoration in the Commencement Bay environment. In particular, the Pilot is to illuminate procedures and time requirements necessary to plan and obtain permits for such a project. In addition, performance of the Pilot provided important insight into the viability of siting habitat restoration projects near industrial activities on the Tacoma tideflats.

The Pilot Restoration Project consists of an approximately 3.3-acre nearshore site in Commencement Bay that restores the estuarine habitat functions. In early 1995, approximately 1.5 acres of industrial fill was converted into estuarine wetland, and the adjacent lower intertidal area was

regraded into a more structurally diverse intertidal area. The site presently comprises a low-elevation mudflat, low salt marsh, high salt marsh and upland riparian buffer. In mid 1995 the riparian buffer was planted with upland vegetation and a smalll area of low salt marsh was planted with sods of saltgrass. On May 22, 1996, additional areas were planted with a variety of low salt marsh vegetation. Post-construction site monitoring began in April 1996.

Monitoring for the Pilot Restoration Project is to provide information necessary for maintaining the newly established estuarine habitat over time and valuable for planning future restoration projects in Commencement Bay. Monitoring includes descriptive studies including documenting general development, use and trends associated with the new estuarine, intertidal and saltmarsh habitat.

Lessons Learned: The upland buffer area has proven to be moving along at a very good pace with a trajectory that can probably be considered successful. The upland restoration and buffer area development have been relatively successful using the approaches used. Recommendations for different plantings and need for ground cover have been made not only for wildlife but also to increase erosion protection and these need to be considered; if this has not been done, it should be now and should not interfere with the monitoring.

The lesson learned is need for additional mid-course corrections at the intertidal portion of the site. The Trustees determined a course of action (adaptive management), based upon a vegetative survey, analysis of critical factors relating to intertidal plants and salinity testing.

Alternative Analysis: If these correction actions are not undertaken then the benefits to the natural resources will not be realized. The "no-action" alternative would result in continued degradation of the original planting, no restored saltmarsh habitat at Middle Waterway, and loss of experimental knowledge to make future restoration efforts more effective and efficient within Commencement Bay.

Adaptive Management: Information necessary for adaptive management was designed to be derived from the post-construction monitoring through routine reporting. Anticipated changes or developments that may require adaptive management include, but are not limited to the following activities

which are included in the restoration plan and have been through previous National Environmental Policy Act review:

1. Failure of vegetation to establish or spread;
2. Possible contamination of sediments above the State SQS levels;
3. Substantial erosion or sedimentation that adversely alters habitat characteristics; and
4. Inclusion of treated storm water flows into the constructed habitat.

Beyond the monitoring requirements set forth in the various permit requirements, the Trustees are responsible for assessing the performance of restoration projects to (1) determine if they are meeting the their goals, (2) establish whether adjustments are needed to better meet the goals (adaptive management), and (3) provide information to improve the design and implementation of future projects.

Adaptive Management Goals: The goals of adaptive management at Middle Waterway are simple to state: 1) enhance the intertidal marsh to produce a functioning intertidal habitat; 2) connect the areas vegetated with tufted hairgrass, and 3) amend the topsoil to enable the other goals to occur and the original goals of the project to be facilitated.

Adaptive Management Objectives:

1. The objectives of the project include soil enhancement of the northern spit at the site.
2. Additional objectives would be to use a similar method of topsoil enhancement to connect the areas of tufted hairgrass, and
3. an additional soil amendment in the southern area of the site the area commonly known as the "dead zone" where vegetation has yet to colonize.
4. The riparian berm will be stabilized through vegetation such as those listed in attachment one. A planting plan will further elaborate on this objective.
5. Experimental hydroseeding will be considered as a method to ensure more nutrient material and ground cover for the berm. Hydroseeding will also, if successful, serve to stabilize the berm.

Adaptive Management Actions:

Task 1. Remove the top two feet of sand from the length of the northern lobe (referred to as "the spit") at the Middle Waterway.

Task 2. Replace the top two feet of sand that is removed with the proper nutrient containing topsoil - a layer of cobble may be mixed into the topsoil to aid in preventing erosion and facilitate the rooting of new plants in the environment.

Task 3. Plant native vegetation in the new soil and provide goose exclusion protection in sample areas.

Task 4. Anchor logs at pre-determined locations (toe of spit and along waterway at the northern-most part of the shoreline) to facilitate the creation of a bench environment and protect the project from erosion.

Task 5. Hydroseed part of the berm with vegetation to be used at ground cover and which will later provide nutrients to the soil - ryegrass was suggested. This will be an experimental activity which will be monitored closely for success.

Task 6. Additional soil will be added along the shoreline in an attempt to encourage the growth and colonization of tufted hairgrass, which appears to be limited by the present nutrient content of the soil.

Based upon the information provided above, and the following:

- the fact that adaptive management activities are designed to produce the results intended for the original process and
- the original Project Environmental Assessment received a FONSI
- the original SEPA Checklist received a DNS and
- the fact that the adaptive management activities consititute only a fraction of the activities required to construct the original project, a decision has been made to prepare a FONSI for this action.

MEMORANDUM FOR THE FILE

Russell J. Bellmer

NOV 4 1999

FROM: Russell J. Bellmer Ph.D.

SUBJECT: Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) - Essential Fish Habitat Evaluation (EFH) for Middle Waterway Shore Restoration Project

The Magnuson-Stevens Act (16 U.S.C. 1801 et seq.) as amended and reauthorized by the Sustainable Fisheries Act (Public Law 104-297) established a program to promote the protection of essential fish habitat (EFH) in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After EFH has been described and identified in fishery management plans by the regional fishery management councils, Federal agencies are obligated to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

This restoration activity, under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), amended by Superfund Amendments and Reauthorization Act of 1986 (SARA), is being undertaken to make the environment and the public whole for injuries to natural resources and natural resource services resulting from chemical spill by returning injured natural resources and natural resource services to their pre-spill, or baseline condition and compensating for interim losses of natural resources. While the overall goal is to restore and enhance the injured habitat, some restoration activities may convert one habitat to another and must be considered as a potential adverse impact to EFH and analyzed appropriately. These potential adverse impacts may include short-term construction activities (e.g., reduced water quality, species displacement, reduced habitat quality) and long-term habitat loss and modification. This proposed restoration project modifies an upland and high intertidal area to significant fish habitat, with construction activities in the dry during extreme low tide during the fish windows. Fish windows are those periods considered by the resource agencies to have a minimum potential for adverse effects on aquatic species.

The area in which the restoration project is planned (reestablishment of intertidal mudflat, saltmarsh, and riparian habitat) have been identified as EFH for species managed by the Pacific Fishery Management Council under the Amendment 11 to The Pacific Coast Groundfish Fishery Management Plan (October, 1998). This Plan identifies twenty-four species and life stages within the estuarine composite EFH. These species include five species of Class Elasmobranchiomorphi and nineteen species of Class Osteichthyes. Eight species of Family Scorpaenidae (rockfish) and four species of Order Pleuronectiformes (flatfish) are identified within the Plan. Environmental conditions (i.e., temperature, salinity, water depth, substrate) greatly reduce the potential for the presence of these species in the project area for even short periods of time during extreme high tides. The species that may occasionally visit the project area include: *Squalus acanthias* (spiny dogfish), *Raja inornata* (California skate), *Pleuronectes vetulus* (English sole), *Errex zachirus* (rex sole), *Citharichthys sordidus* (Pacific sanddab), and *Platichthys stellatus* (starry flounder). Due to construction activities in the dry or at extreme low tide during periods of the year with minimum fish activities, no adverse impacts will occur to EFH. The proposed Middle Waterway Restoration Project consists of corrective management actions in 1.5 acres of intertidal habitat by re-grading and re-planting with native vegetation. All relevant and appropriate Recommended Conservation Measures identified in the Plan (11,10.4.1 Adverse Nonfishing Impacts and Recommended Conservation Measures) have been incorporated in the proposed project plans. After construction these species may occasionally wander into the newly created habitat area. After specific restoration project details were developed, the Trustees evaluated and coordinated their plans with the National Marine Fisheries Service Northwest Region (NMFS-NWR) to ensure no adverse impacts to EFH. If the proposed project plans are substantially revised or if new information becomes available that affects the basis for conservation measures, then supplemental consultation will be undertaken.

MIDDLE WATERWAY RESTORATION PROJECT

In the spring of 1995, Champion International Corporation, the former owner of the Simpson Tacoma Kraft Mill, and Simpson Tacoma Kraft Company, its current owner, in cooperation with the Commencement Bay Natural Resource Trustees, created the Middle Waterway Restoration Project on a 5-acre site owned by Simpson on the northeast bank of the Middle Waterway. The project was developed in connection with a settlement approved in court on April 1, 1996, that resolved Bay-wide claims for natural resource damages against the two companies.

The Middle Waterway project re-establishes 4.7 acres of intertidal, salt marsh and riparian habitat along Middle Waterway, a high priority location for restoration in the Bay ecosystem. This waterway had one of the largest remaining areas of original intertidal mudflats in the Bay (about 20 acres).

Formerly filled land has been excavated and contoured to create a natural shoreline with hummocks and other natural marsh features, increasing the complexity, diversity and habitat value of Middle Waterway for shore birds, salmonids and marine fish, river otters and other wildlife in the area. The project will provide a partial buffer between the mudflats and adjacent upland industrial uses.

The $1.2 million shoreline restoration project began in spring of 1995 with construction and planting of 600 native trees and shrubs. Over two hundred local residents -- including two Cub Scout packs -- volunteered to help with the planting. An additional 300 plants were planted in October 1996. The non-intertidal plantings were very successful. The intertidal plantings were initially successful but died back over time.

These restoration efforts will result in:

- Development of a pilot shoreline restoration project for experimental purposes to better design larger restoration projects in a landscape fashion around the Bay;

- New estuaries along formerly industrial shoreline providing nesting, nursery, and feeding habitat for fish, invertebrates, waterfowl, and shore birds;

- Restored plant communities, including one acre of native salt marsh vegetation, and another half-acre of native trees and shrubs;

- Restored estuarine habitat for juvenile chinook, coho, pink and chum salmon originating in the Puyallup River.

[note: On June 15, 1996 Terry Garcia participated in a ground-breaking ceremony for the Middle Waterway Shore Restoration Pilot Project.]

Adaptive Management to Middle Waterway Restoration Project

Due to the die back of the intertidal vegetation the Trustees determined the following actions were needed to realize the natural resource habitat benefits:

- remove and replace the top two feet of sediment

- undertake experimental vegetative plantings

- development of a wetland bench topography

- hydroseed part of the upland berm